USCMS Engineer Status Report for December 2003

Natalia Ratnikova

February 17, 2004

1 Work Performed This Month

*** DPE release management

DPE_2_4_0 release was finalized and announced on December, 1st. It included updates of the DPE tools for OSCAR production.

*** DAR presentation for ACAT03.

I could not go to Japan personally, due to the difficult procedure of getting US visa to come back. However this conference was an excellent opportunity to present DAR related work done during last year, and give an overview of the DAR use in the CMS production. I've added implementation details, since there was an interest from the d0/CD colleagues, using similar distribution concept implemented in the D0RTE utility. Anzar provided contribution about installing DAR files on the US GRID using MOP. Yujun kindly agreed to present the talk in Japan.

*** RefDB-DAR interface

Investigating the possibility to reduce the size (e.g. for a few COBRA utilities). Default COBRA distribution turned out to be 20% bigger than ORCA. One of the solution would be to remove unneeded tools from the configuration, as this should cleanly remove all runtime environment associated with a given tool. However "scram tool remove" command does not work properly because of bug in SCRAM. Submitted scram bug report to Savannah system.

Added extension in refdbdar to allow to specify tools to be removed in the request file. It would be nice to get information from the BuildFiles on which tools are needed for the particular executables, to get a list of tools that could be removed. Postponed this work until "scram tool remove" bug is fixed.

Extended refdbdar interface to allow RTE ignore file to be passed to DAR from the request file.

*** DAR support

Improvements and fixes in support of new refdbdar functionality. //Created ORCA_7_5_2 darball .

*** DAR-2: working on new concept and design.

Formulated requirements and a basic use cases. Worked out a principal design (classes, responsibilities, and collaborators for the main use cases), with the focus on the scalability and backward compatibility issues.

Prepared some UML class diagrams, and the first draft of the document "DAR-2 Concept and Design". //Started implementing basic classes (RTE-Variable, Request). //Familiarizing myself with the Tkinter and PMW, as base tools for developing the DAR-2 GUI.

*** UAF work

Discussed with Hans the process and plans for users support and managing software installations on the UAF. Outcome:

- we should urge users to use helpdesk
- discussed AFS stability: //I experienced very slow response while accessing POOL release at CERN last week. Hans mentioned there was a disruption of AFS access on Friday. Other than that afs is stable and performs satisfactory.
- local installations on the UAF: // The recently released ORCA_7_6_0 behaves badly, as reported by Julia. Inconsistencies were also reported in in xcmsi tool and DVD distributions for ORCA_7_5_2. RPMs for ORCA_7_6_0 are not ready yet. It would be good to have some stable and usable version installed locally. However ORCA_7_5_2 is not interesting for users, as it does not contain reconstruction and analysis subsystems. ORCA_7_6_0 is not tested enough and its distribution is not provided. We will go for the local installation as soon as we have the stably performing software release ready.
- the OS upgrades (currently discusses in the uscms_testbed forum): //no reason for us to hurry with an upgrade or tests.

*** Users support

Verifying status of Fast Simulation CMS software packages, requested by users from the JHU. The CMSJET package they referred to is not supported anymore. Checked that CMS OO project FAMOS examples run successfully

on the UAF (against CERN installed release). Put user in touch with the former CMSJET developers, and pointed out to the FAMOS, which supposed to preempt the CMSJET functionality.

Consulted Rob Harris concerning using ORCA on the UAF.

2 Status of Deliverables

DPE software released. Requests for DAR files satisfied. DAR2 development work in progress. UAF software and users support plans coordinated with UF group.

3 Plans For Next Month

Provide local software installations at Fermilab.

4 Longer Term Plans

Work on optimization of the DAR tool, to make its use more efficient for the physics analysis on the GRID. Continue managing DPE software releases as needed. Support for CMS software at FNAL and for UAF users.

5 Links To Supporting Documentation

- $\bullet \ \, \text{http://www.uscms.org/scpages/subsystems/gridinfo.html} \\$
- http://www-conf.kek.jp/acat03/prog/presen/id0114.ppt
- http://home.fnal.gov/natasha/dar2.html